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Weekend Handover in a Paediatric Hospital: Introduction of SBAR

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Weekend Handover in a Paediatric Hospital:

Introduction of SBAR

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Declaration Form

“I hereby certify that this material, which I now submit for assessment for the MSc in Leadership in Healthcare Professions Education, is entirely my own work and has not been submitted as an exercise for assessment at this or any other University.”

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Abstract

This change project centres on the implementation of a structured communication tool in a medical handover meeting within a Paediatric hospital. The primary aim was to improve the structure and content of the weekend handover and optimize learning for those attending.

The main objective was to introduce an adapted SBAR (Situation, Background, Assessment, Recommendation) tool for use in case presentations and in doing so to provide an encouraging and supportive learning environment for those partaking in the handover .

The HSE Change model was used to structure the change in this project and the comprehensive approach suited the project.. The evaluation to date has been positive, however the author predicts that the handover will be improved continuously, with ongoing user feedback.

While the results are promising based on the initial evaluation of the project following implementation, it is clear, however, that a longer study on whether the effect on SBAR on handover is sustained is required and this will require ongoing evaluation and input from all those attending.

A well-led handover session provides a useful setting for clinical education as shown in this study and going forward the continued implementation and development of the changes made should make for a sustained and lasting change for the better within the organisation.

Chapter 1 Introduction

1.1 Introduction

This change project centres on the implementation of a structured communication tool in a medical handover meeting within a Paediatric hospital. It aimed to improve the structure and content of the weekend handover and optimize learning for those attending. In this chapter the change project undertaken in the setting of handover will be introduced. The author will outline the project with reference to the nature of the change, the organizational context, the rationale for change and the overall aim and objectives of the project. Guided by the framework of the HSE Change Model (HSE, 2008) the change process is described and its strengths and limitations acknowledged. Underpinned by the evidence in the literature the perceptions and experiences of participants during the change process is evaluated using the CIPP Model (Stufflebeam, 2001) of evaluation.

1.2 Aim and Objectives of the Study

The aim of the study was to improve the structure and content of the weekend handover meeting in a paediatric hospital. In doing this the aim was to streamline the presentations to optimize learning for those attending handover whether they be junior or senior members of staff.

The objectives of the project were as follows:

- ❖ To introduce an adapted SBAR (Situation, Background, Assessment, Recommendation) for use in case presentations
- ❖ To use SBAR to provide a stimulus for learning and set the stage for contextual learning
- ❖ To provide registrars with a structured proforma to summarise their admissions and to encourage its' use to facilitate better presentation of cases
- ❖ To identify a facilitator for the handover meeting in the form of a consultant to enable the handover to run smoothly
- ❖ To provide an encouraging and supportive learning environment for those partaking in the handover

1.3 Introduction to Handover

Handover may be described as the “transfer of professional responsibility and accountability for some or all aspects of care for a patient, or groups of patients, to another person or professional group on a temporary or permanent basis” (BMA 2005). It has repeatedly been pointed out that a lack of formal training and formal systems for patient handover impede the good practice necessary to maintain high standards of clinical care. Thus, patient handover has been defined a research priority for patient safety, and research in this field is increasing

rapidly. Handing over responsibility for patients has always been part of medical practice. Definitions emphasise transfer of responsibility to ensure patient safety and the available literature tends to follow this line. Handover is much more than this, however. The author believes that it is a key event where teams meet, have the opportunity to communicate, support each other and learn as is the case in the organization which is the setting for this change project. It is clear that considering different ways of maximising learning opportunities in handover, with particular emphasis on the strengths and challenges of the paediatric environment is the key to improving the experience for those involved. Formal handover has increased in importance and been embedded in practice with the transition from “on-calls” to “full-shift” rotas in an effort to comply with the European Working Time Directive in the United Kingdom (UK). As the Irish system moves toward the implementation of EWTD the significance of effective handover is becoming ever more important.

1.4 Rationale for carrying out change

As detailed in the Hunt Report (2011) and HEA Report (2013), the call for improved efficiency and accountability to stakeholders in all areas of educational activity has never been more prominent than today.

In response, organisations have had to rise to the challenge and look for innovative ways to deliver a reformed education experience to all

stakeholders. A key area for development under this reformation is the commitment to quality assurance and quality enhancement in teaching activity and the professional development of academic staff (Hunt, 2011). Departments responsible for acute patient care have had to incorporate two or three handover sessions into every day to ensure patient problems and management plans are appreciated by the incoming medical team. As a result, healthcare systems, at the request of regulatory agencies, must now ensure that handover processes are safe and reliable. Similarly, medical education programmes and credentialing bodies are required to monitor clinician competence with respect to handovers. While the need for added training in handovers is gaining wider acceptance, assessment of the effects of education on the ability to provide safe and effective handovers has lagged behind.

It has been shown that inadequate handover has implications for patient care and safety, with communication failures identified as the root cause in over 70% of adverse hospital events (Leonard, 2004) Good doctor to doctor handover, therefore, is vital to protect patient safety and it has been shown previously that effective multi-disciplinary handover is important to ensure all groups of staff are updated with current patient information. With the increase in shift pattern working, the importance of good handover has never been so high but it is clear that systems need to be put in place to enable and facilitate handover. These

systems, although based on a generic model, must be adapted to local needs and adapted to suit the needs of those participating. With this in mind, the author chose this project which was tailored to the specific needs of the people involved within the weekend handover, including both junior and senior members of staff.

As described by the BMA educational guidance on clinical handover for clinicians and managers (BMA, 2005), better handover is of daily benefit to practice and helps the development and broadening of communication skills. A well-led handover session provides a useful setting for clinical education and improved job satisfaction in knowing that you are providing the best possible quality of care which is highly rewarding and is fundamental to a doctor's sense of job satisfaction. Studies have shown that junior doctors contribute substantially to the education and clinical training of other doctors and that the knowledge and professional competency of junior doctors correlate positively with their perceived teaching abilities (Busari & Scherpbier 2004, Barrow 1996). Surprisingly, therefore, training in teaching, and frequent and constructive feedback in teaching can be lacking in educational settings. Therefore, medical handover could be used as a distinctive platform for junior doctors to improve their teaching skills and confidence. Apker *et al.* (2004) noted that handover involves a highly public display of professional identity expectations. It has been noted previously that case

presentations turn into self-presentations as doctors develop skills and strategies ascribed to the role of doctor in front of an evaluative audience as described by Remmen *et al* (2000). Specifically in the environment I am dealing with, the participative nature of the handover involves registrars in discussion so that both peers and seniors can evaluate their case knowledge, mastery of medical information and clinical skills. A number of recommendations have been made on how to improve handover. These include ensuring a set time and place free of interruption, training sessions, senior supervision and use of electronic aids (Sandlin, 2007; Arora *et al* 2005)

One important recommendation is that handover should follow a standardised approach, (Arora *et al* 2008, Woodhall, 2008) such as the framework designated by the acronym SBAR. The rationale for the introduction of the structured case presentation with SBAR was to provide a stimulus for learning and set the stage for contextual learning. SBAR has been developed as a memorable and easy to use framework for efficient and effective communication. The tool consists of standardised prompt questions within four sections, to ensure that clinical staff share concise and focused information. It allows staff to communicate assertively and effectively, reducing the need for repetition. The idea behind the introduction of this structure was that the ensuing discussion and teaching points following case presentation

using SBAR could potentially impact the learner's understanding of patient related issues and foster a new perspective of how illnesses progress. By using this tool there should be increased dialogue between the team members and the facilitators role would be to reinforce the relevant teaching points from the case. SBAR is thought to create conditions for accurate information exchange and encourage dialogue, and the WHO (2007) recommends using it in healthcare to increase patient safety. Using a communication tool, important information can be transferred in a brief and concise manner, and in a predictable structure as described by Leonard (2004). This is why it was chosen as a tool for implementation as its use has been shown in previous studies to improve collaboration and communication, as perceived by professionals using the tool on a daily basis to handover (De Meester *et al* 2013). Other studies have also shown improvements in team communication and the safety culture within organisations (Velji ,2008)(Andreoli, 2010) when using standardised tools to communicate.

1.5 Context for the change

This project was carried out at a tertiary Paediatric Hospital. It concentrated on a local handover report which happens each week on a Monday morning (08:30 am) in a conference room, lasting approximately 40 minutes. Typically, case descriptions of acutely admitted medical

patients from Friday, Saturday and Sunday are presented by the Paediatric registrars centrally involved in their care for those respective weekend days. The audience consisted of paediatric non-consultant hospital doctors (NCHDs) of various grades and consultants, who generally supervise the event. Historically weekend handover report was used to suit the purpose of the local community of paediatricians to gain awareness and discuss key cases at the beginning of the working week. However in this project the involvement and collaboration of both consultants and the non-consultant hospital doctors (NCHD's) to implement the proposed changes was considered central to the success of the change project within the organization. Within the study there were distinct roles to be played by both junior and senior doctors within the handover. The participation of the junior doctors was something that was deemed vital to the success of the project. Prior to the introduction of this project the handover meeting relied heavily on the consultants for their expert opinion on the cases discussed.

By introducing the SBAR as a tool and streamlining the presentations the aim was to leave more time for open discussion and debate with regard to the management of the cases. The participation of all members of staff within the meeting was to be encouraged to improve engagement of all those attending the handover. The role of the facilitator was also vital to establish as this was the person responsible

for the overall structure and timeline of the handover. It was proposed that the consultant on call for the weekend would be the one acting as facilitator to increase the support for the presenter. With regard to the implementation of SBAR the participation of the registrars on call and their willingness to take on SBAR as a new way of presenting the cases was important and this is described in detail within the change chapter.

1.6 Summary

Change initiatives in education and handover practices are taking place across the board in hospitals as organisations have had to rise to the challenge of an increasingly pressurised work environment. A key focus of this revolution is the quality assurance and quality enhancement of teaching activity and the professional development of teaching staff. This project is based on the implementation of a structured tool to improve the educational content and value of a weekend handover meeting in a Paediatric hospital. In this thesis organizational change associated with the implementation of this tool will be discussed and the challenges faced while trying to initiate change within a healthcare organisation.

Chapter 2 Literature Review

2.1 Introduction

Doctors at all levels of training are increasingly required to demonstrate that they are continuously learning in order to achieve high-quality health care (Wohlauer, 2012). Various studies have proposed that much of this learning is embedded in actual practice, although time availability for teaching and learning, as well as the learning environment itself, are other significant factors (Watling 2012, Van der Viel 2011). Handover provides a useful and practical setting to incorporate learning into everyday practice. In this chapter the author will discuss the available literature on handover, learning in handover and the evidence for the use of structured communications tools such as SBAR in the hospital setting.

2.2 Search Strategy

The bibliography assembled for this thesis included original articles, systematic reviews, narrative review articles, and other documents identified through PubMed, Ovid Medline and Google Scholar Database searches. Several articles were also identified through searching reference material of key articles. Relevant theses, health-related and health authority documents were also identified by searches using the

Google search engine and relevant website searches (e.g. World Health Organisation and the NHS websites).

Depending on database and the search evolution, keywords, related terms and synonyms included:

1. Doctor (NCHDs, resident*, fellow*, house officer, intern*, registrar*, consultant*, staff physician*)
2. Handover (patient handoff, patient handover, patient transfer, SBAR, “Situation Background Assessment Recommendation”, ISBAR, IsoSBAR, morning report,)
3. Education (educat*, learn*, medical knowledge)
4. Workplace learning (informal learning, practice based learning, experiential learning, tacit knowledge)
5. Case presentation, novice, expert, clinical reasoning,

The themes discussed in this chapter reflect the main themes that emerged when the above literature search was carried out and include a background to handover, the learning environment/culture, use of standardised communication tools, the role of professionalism and feedback within handover.

2.3 Rationale for Improving Handover

Handover, or an equivalent term 'handoff', is the exchange between health professionals of information about a patient accompanying either a transfer of control over, or of responsibility for, the patient as described by Cohen (2009). The National Patient Safety Agency (NPSA) has defined clinical handover as a process where there is 'the transfer of professional responsibility and accountability for some or all aspects care for a patient, or group of patients, to another person or professional group on a temporary or permanent basis' (NPSA, 2007).

Miscommunication during transfer of care for hospitalised patients is common and can result in adverse events (Shojania, 2007). Guidelines and recommendations for handover practices have been proposed by patient safety organizations around the world. In particular, the use of standardised approaches during handovers, including mnemonics that establish topics and their sequence, has been promoted and adopted by accreditation committees as seen in particular in the 2008 Joint Commission on patient safety goals hospital program. Communication handoffs are critically important in creating a shared mental model around the patient's condition. Without a good shared model, we lose situational awareness. This loss of situational awareness has led to well-known tragedies as described by Wachter (2004).

Daily experience in health care has taught us that there are many opportunities for improving the passage of information during handoffs and this is the main driver for organisational change within the project. Common outcomes found across studies for use of SBAR were improvements in communication, teamwork, patient safety/outcomes, and satisfaction (Boyle & Kochinda, 2004; Carroll, 2006; Haig, Sutton, & Whittington, 2006; Leonard et al., 2004). Studies have previously reported that the SBAR communication tool alone will not significantly improve outcomes. An educational intervention that provides information on communication strategies and styles, and collaboration/teamwork strategies will have a positive effect on work environments, resulting in improved communication, teamwork, satisfaction, and patient safety outcomes (Makary et al., 2006; Pearson et al., 2006; Simpson, James & Knox, 2006).

2.4 Quality of Handover

Patient handover is one of the few areas of medicine which has limited evidence base and consequently limited guidance Ferran (2008). Good communication is essential between all doctors to protect the safety of patients when shifts are introduced (BMA, 2003). In one study, junior doctors felt that existing handover arrangements were frequently not as good as they would have liked them to be (Roughton and Severs, 1996).

However there is evidence that the use of a preferably typed, standard proforma does reduce the potential for error as described by Curtis (2013). Despite the National Patient Safety Agency (NPSA) publishing 'safe handover: safe patients' to improve the quality of handover amongst healthcare teams, this is largely based on clinical expertise rather than clear evidence and there is still concern amongst junior doctors (BMA,2004). With evidence suggesting that the quality of handover is often poor (Roughton and Severs,1996)(Sabir *et al* 2006) (Anderson, 2006) the development of an understanding of how mistakes in handover can lead to serious failures can jump-start initiatives to improve patient safety (Patterson *et al* 2004). Most of these initiatives have been developed with help from outside medicine using, for example, expertise from space, nuclear, aviation and motor-racing industries. (Catchpole *et al* 2007) While the aim of this change project was primarily to do with improving the educational experience for those involved it is important to mention and consider closely the patient safety element when discussing improvement to patient handover systems as this is inherently interlinked.

2.5 Use of Structured Handover Tool

Current handover practices are criticised as being highly variable, unstructured, and error-prone (Bomba *et al* 2005).

International evidence suggests few trainees receive formal instruction on the handover process, and it is unknown how many doctors are currently receiving training or evaluation in handover. Inadequate handover has implications for patient care and safety, with communication failures identified as the root cause in over 70% of adverse hospital events. (Leonard *et al*,2005)

The SBAR tool may improve handover by providing a template which creates a clear picture of the patient's clinical issues while also defining outstanding issues and tasks. It aids communication by offering an expected pattern of transferred information so errors or omitted information become clear (Vidyarthi *et al* 2005, Woodhall *et al* 2008).

Many physicians, especially junior doctors, feel unprepared due to a lack of training with regard to handover communication (Cleland *et al* 2009) (Horwitz *et al* 2006). It is recognised that most junior doctors receive little or no education in handover and this contributes to weaknesses within handover systems (WHO,2007).The extent to which educational interventions are used to improve handover and how well the conceptual frameworks and models are reflected in these interventions remain unclear. It has also been shown that many physicians believe that their handover practice needs improvement and as a result they report a need for guidance on the structure of handover (Roughton & Severs, 1996).

There are growing recommendations for the use of “standardised” or structured content communication schemes during handovers, the goals of which are to improve information accuracy and patient safety (Riesenberg, 2009) (Wayne, 2008). An example of a mnemonic standard protocol would be the SBAR approach to handoffs, or one of its many variants (Haig *et al* 2006, Leonard *et al* 2004). In this often-recommended approach, a handoff should communicate the Situation, an Assessment, the pertinent Background and a Recommendation for action. This requires each implementing unit to consider how these generic features should be locally instantiated (Pillow, 2007). Lessons on how to improve hand-overs are being learned from other high-risk industries such the aviation and nuclear power industries. One such lesson is the need for a common language for communicating critical information. Incorporating situational briefing techniques such as the SBAR process which has been shown to provide a standard communication framework for patient care handovers (Joint Commission,2006). Simply providing opportunities for providers of care to ask and resolve questions can improve the effectiveness of hand-over communication. Streamlining and standardising change-of-shift reporting can enhance critical thinking, as well as minimize time spent away from the patient.

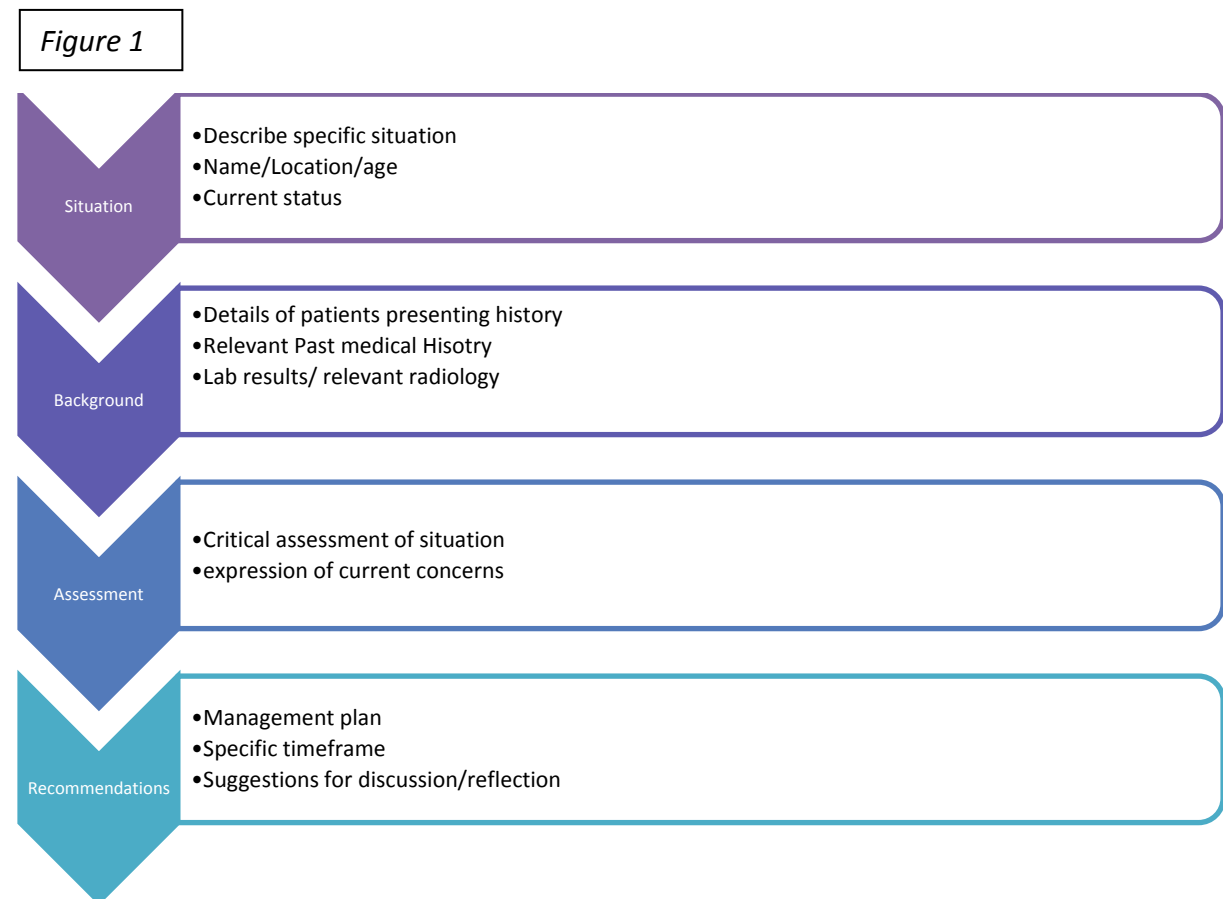
SBAR is an easy to remember mechanism that can be used to frame conversations, especially critical ones, requiring a clinician's immediate attention and action. It enables you to clarify what information should be communicated between members of the team, and how. It can also help in the development of teamwork skills and fostering a culture of patient safety. The tool consists of standardised prompt questions within four sections, to ensure that staff are sharing concise and focused information. It allows staff to communicate assertively and effectively, reducing the need for repetition. Using SBAR prompts staff to formulate information with the right level of detail. The tool helps staff anticipate the information needed by colleagues and encourages assessment skills.

Providing flexible learning opportunities that can be accessed by a variety of learners, from senior house officers to consultants can be highly effective in developing confidence and competence for effective and structured communication within the environment of handover.

The SBAR developed for health care by Leonard and colleagues (2004), may be useful as it can be used to efficiently hand over individual patients in approximately 30–60 minutes. By introducing a system such as SBAR it is thought that inter-professional communication should improve as well as the efficiency of communication.

By doing this it should allow all members of the team lower down the hierarchy to add to the conversation in an organised fashion.

The steps involved in using SBAR are seen below in *Figure 1*.



2.6 Cultural Context and Learning Environment

Education is not simply a technical business of well managed information processing, nor even simply a matter of applying 'learning theories'... It is a complex pursuit of fitting a culture to the needs of its members and their ways of knowing to the needs of the culture (Bruner, 1996). When considering this project the author believes it is imperative to consider the cultural context within which the educational change is

taking place. The learning environment is something that plays a vital role and to implement a change within this, it is important to consider how people learn.

A number of authors have conceived learning as a socio-cultural phenomenon. Bruner's (1996) celebration of *culturism*¹ takes inspiration from the evolutionary fact that the mind would not exist save for culture'. Eraut (2000) presents two arguments as to why knowledge may be conceived as a social, rather than an individual, attribute. The first of these hinges on the concept of *distributed cognition*; that in certain situations individuals are unable to act effectively as they depend on the knowledge of other people or other thing. The second argument is derived originally from the developmental theories of Vygotsk and is based on the concept that learning is embedded in a particular set of social relations and that by inference a given piece of knowledge may be socially rather than individually constructed.

Thus there is a subtle process of change at work as a trainee develops into a professional, a process which itself is more about being than doing, and this progression may be enhanced by creating a favourable working environment. Again, in their consideration of environment, medical educators have tended to concentrate on facilitating cognitive processes, by, for instance, the creation of reflective time and

opportunities for modelling. It is increasingly more evident that without individual engagement, learning will be at best strategic or superficial and at worst, non-existent, and engagement is reliant on the affiliation of the individual's interests and values with those of the social practice: The greater this relatedness, the greater the likelihood of full-bodied and committed participation(Entwhistle,1997) (Billett, 2002).

In reporting the comparatively large proportion of informal learning occurring in the workplace it would be a mistake to believe that learning in the workplace often approaches its potential. A typical work group comprises a changing set of individuals who spend varying periods of time within it. These individuals come from and go on to other groups, sometimes within the same organization, sometimes not. As described by Eraut (2000) each has a distinctive learning career that can be traced through a chain of work groups: in some groups it flourishes, in others it stagnates or regresses. This depends on how much group members learn from each other, to what extent individuals of the whole group respond to the challenges of their work and support each other, and what additional learning opportunities for the group are located and developed. In the learning environment that I am working in it is evident that the teaching and learning environment within the handover is very much dependent on the individuals present at any one handover.

The challenges faced in implementing change within a hospital handover session in a practical sense is very evident as doctors change jobs and possibly hospitals every six months in most cases, so few groups within the hospital setting are sufficiently stable and coherent to develop a positive learning climate quickly and spontaneously. There is evidence to suggest that management styles and local workplace climates affect learning, retention and quality improvement in similar ways. (Eraut 2004a) In this way it would appear that it falls to the consultants within the organisation to continue to support learning within the context of the handover as they are the ones that are present on an ongoing basis within the organisation.

The workplace is responsible for shaping both unintentional and intentional learning activities through its participatory practices. Workplace affordances will vary from site to site and from social group to social group and educational managers need to examine institutional arrangements and workplace norms to establish the degree to which these are invitational or excluding. According to Fuller and Unwin's terminology (2003) the expansive apprenticeship model also demonstrates a number of affordant institutional features, including the obvious recognition in the employment relationship of the junior staff members status as learner – thereby legitimising the learner's peripheral participation. They also argue that organisations which offer

an expansive approach to apprenticeship are more likely to create learning opportunities that foster 'deep learning'. Applied to medical education, the concept of an expansive apprenticeship supports the idea of teaching units (teams, hospital or practices) providing a broad base of experience both within and outside the immediate working environment. The explicit recognition of the doctor as learner, rather than service provider, is also key, as is the classification of materials associated with that attachment, in the form of manuals, logbooks and learning materials. When looking at the meeting, comparisons are made to the morning report style adopted in the US. Morning report is an integral part of most medical residency programs across North America. The format is typically a presentation of a recent clinical case and discussion of this case led by one or more residents with attending physicians, residents, and medical students participating in the case discussion. While originally implemented to help oversee the care of patients, the focus of morning report has more recently shifted towards education. (Amin et al 2000) The impetus for change has been supported by surveys showing that residents feel education should be the primary purpose of morning report (Gross *et al.*1999). Indeed a previously carried out survey of resident attitudes found that morning report was ranked as the most valuable educational activity within residency curriculum (Ways et al, 1995). The responsibility of organizing and delivering morning report and

facilitating the subsequent discussion typically falls on senior residents, which is similar to our report with the responsibility for presentation falling to the registrars on call. This choice would appear to be appropriate as residents report teaching as a valuable and enjoyable part of their training. Moreover, the valuable contribution of residents as teachers is becoming increasingly recognized (James *et al* 2006). Despite these teaching demands, residents in many programs are given little, if any, formal instruction on how to become effective presenters. (Morrison *et al* 2001). Taking inspiration from this approach, the author concentrated on the educational value of the handover meeting as this had in previous studies, as mentioned above, been rated as useful to trainees.

2.7 Role of Professionalism in Handover

Handover has been identified as a time for teaching professionalism as described by Arora (2008). Previous studies have asserted that professionalism is an integral part of handover. It is clear that by contributing to the handover the practitioner's sense of identity as a master is enhanced as he or she offers graded contributions, from low to high accountability. As a result of being presented with work opportunities of increasing 'challenge and value' the individual develops a heightened sense of professional identity as described by Wolpaw

(2012). Central to this escalatory process, however, must lie feedback and support, and the building and maintenance of learner confidence. (Kennedy, 2007) Handover has been identified as a time for teaching professionalism as identified by Aurora et al (2008) As mentioned previously, it has been shown that professionalism is an essential part of handover. Following on from this it has also been theorized that it is a time when “ownership” of a patient can be encouraged as described by Cosgrove et al (2005). Specifically, Arora et al. suggest that professionalism can be redefined with a focus on “shared responsibility”. This concept suggests that high standards of professionalism be maintained even if a long-standing relationship with the patient does not exist, such as during handover of the patient to a new physician.

2.8 Learning in Handover

Handover provides a feasible if challenging area within which to ensure an educational opportunity in clinical practice is not missed. The reaction to the pressures of providing “concentrated learning” has often been to pull trainees from service and “teach them” despite the evidence that professionals learn best by being part of the activity they are learning. According to Daines et al (1993) adults are likely to learn more effectively when the learning tasks are seen to be relevant, meaningful, interesting and useful. During the handover meeting therefore should

provide such an opportunity as it provides the function of handing over the patients which makes it highly relevant to those attending while delivering a chance for a teaching “moment” also. While it is clearly possible to design classroom teaching that addresses these principles, learning as part of working is imbedded in what the learner needs and wants. Immersing someone in work is not enough for them to learn, however. Good learning is integrated with work, not replaced by it. As described by Hargreaves (1997) it is clear that on the job education needs to be planned rather than opportunistic. It should not be intrusive and should be viewed as an investment rather than a duty. The challenge is therefore to provide teaching that is planned, interesting, useful and meaningful if we are to successfully provide occasions for learning within the workplace environment. The weekend handover meeting is a regular event which involves review of clinical care in the preceding time period, synthesis of clinical cases and planning of both clinical (treatment and investigation) and practical (who will do what) issues. Trainees also need to be taught the operational and communication skills of handing over: prioritising of information, summarising, presenting and questioning skills. It also provides a daily opportunity for case-based learning with the chance for trainees to discuss clinical issues with senior colleagues in an open forum. Clinical findings, investigations, differential diagnoses, management plans and

prioritisation can be discussed and fixed ideas about clinical cases challenged to encourage broad and open thinking. The evidence base and an exploration of the process of clinical reasoning and decision making can also be covered.

2.9 Feedback in handover

It is clear that the learning potential versus patient safety within the handover meeting needs balance and may sometimes conflict, for example, the need to ensure a team understands there has been an error versus the educational context of using error to teach. The timing, content and approach of feedback have to be carefully handled.

Handover often involves the more junior and often most tired members of the team discussing their patient assessment and management skills with the more senior and often better rested. If trainees are to benefit from discussion and critique of their actions and the team is to learn from the successes and challenges of the last shift, then a constructive, appropriately challenging, but blame-free culture is required. Trainees must feel able to discuss issues openly expecting support, understanding and guidance of how to do better next time, rather than accusation or humiliation.

Feedback immediately after a shift has finished has advantages of being current and helping guide reflection. Difficulties include finding sufficient time when clinical matters (eg, a ward round) are pending and finding an appropriate environment for individual feedback, particularly when this may be sensitive for the individual yet a learning opportunity for the whole team. In some cases feedback will provide helpful closure and in others stimulate anxiety and upset at a time when trainees should be resting prior to their next shift. Alternatively, feedback can be given at a later date, but in reality these opportunities are often not taken and team-learning opportunities can be missed (Anderson, 2006).

Considerable literature exists on how to improve reliability and safety within safety-critical systems and these lessons are being applied to healthcare. (Schulman, 2004) Thus, policy at the system level exists that can be implemented in order to promote the effective transfer of information and responsibility and/or accountability across clinical handover. For example, policies designed to improve safety practices, emphasising issues such as teamwork, leadership and trust, contribute to improved communication and learning.

2.10 Conclusion

This chapter has provided a critical discussion of the key issues surrounding handover and the use of SBAR as a handover tool. It is clear that effective handover within the health care setting is vital to patient safety. Despite published literature discussing strategies to improve handover, the extent to which educational interventions have been used and how such interventions relate to the published theoretical models of handover remain unclear. Handover is right at the interface between service provision and education and is an area where these two essential components of medicine have to overcome difficulties to successfully work in tandem. There are, however, many simple ideas to improve practice in terms of patient safety but also maximise learning opportunity. Handover is here to stay – we need to do it well and make the most of the opportunity it provides. It has the potential to be the champion of good work based learning. It is also evident from the literature reviewed that SBAR is becoming more widely employed within handover practice. There is consensus in the literature that education and learning within handover is possible if within a supportive environment. Reflection and feedback appear central to the whole process, thus creating an environment of mutual trust and respect which has been proven to be important to enable individuals actively engage in the process of handover.

Chapter 3: Change Process

"Change is the only constant." Heraclitus, Greek philosopher

3.1 Introduction

In this chapter, the author discusses the change process undertaken, including its limitations and successes. With reference to the type of change being undertaken the change model chosen is discussed. Following on from this the chosen model's suitability to this project is examined. Organisational evidence to support the project was generated by additional change management tools including a SWOT and stakeholder analysis (See appendix A).

3.2 Models for Change

Certain factors may help to foster an environment that is conducive to change. An organisation where there is strong leadership and everyone is focused on improving patient care is likely to develop motivated staff with a desire for continuous improvement. However, barriers to changing established practice may prevent or impede progress in all organisations, whatever the culture. Organisational change is a structured approach in an organisation for ensuring that changes are smoothly and successfully implemented to achieve lasting benefits (Lientz BP 2004). The adoption of change management practices,

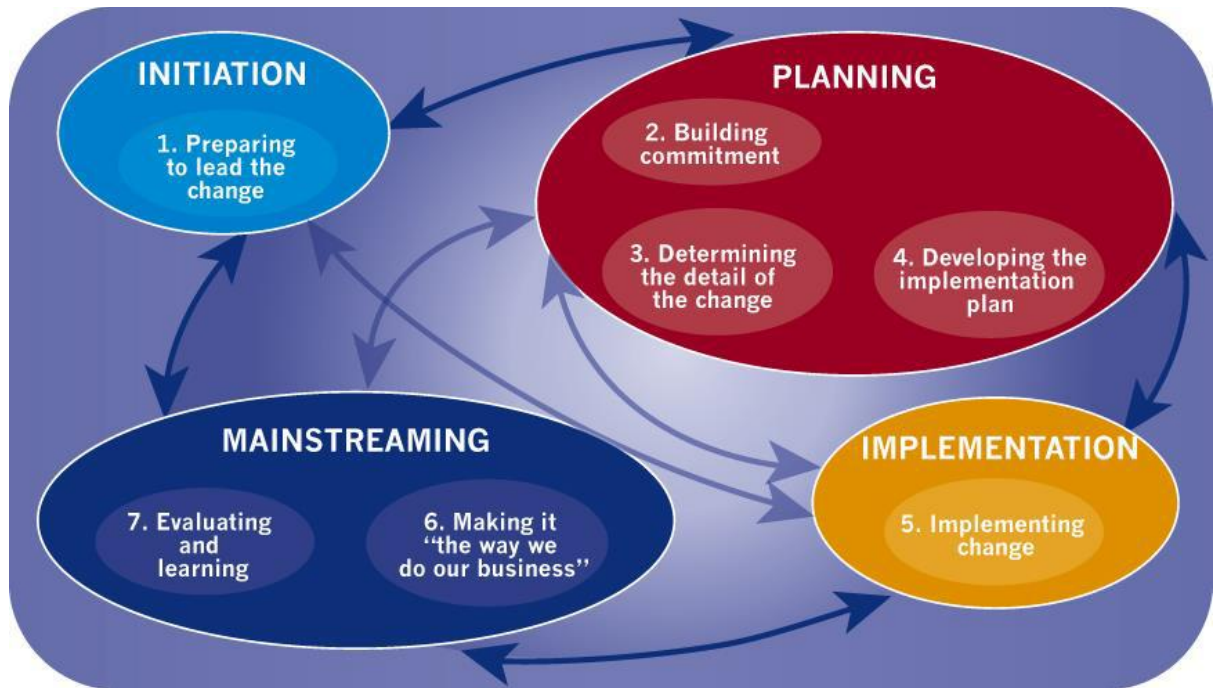
improves the probability of change occurring, by focusing on the individuals within the organization who are the effectors and on the resultant effects. Despite widespread acceptance of change necessity, seventy percent of initiatives fail due to an effective leadership deficit throughout the process (Kotter 1990, Gill 2003)

In 2008 the HSE in Ireland developed a change model, detailing a step-by-step approach to managing and implementing change within the complexity of the Irish health service (*Figure 2*). This model is grounded in an organisation development approach which places a strong focus on the people aspects of change. It is combined with project management which brings structure and discipline to the process. Organisational change, the model quotes, is also dependent upon people changing. Therefore, it cannot be predicted easily and can emerge over time. While this model is strictly speaking, one of planned change, its specificity to a health service imbibes an awareness of a continuously changing environment.

The HSE Change Model has been developed to:

- ❖ Improve the experience of patients and service users
- ❖ Help staff and teams play a meaningful role in working together to improve services
- ❖ Promote a consistent approach to change across the system

Figure 2: HSE Change Model



Model adapted from: Kolb, D. and Frohman, A. (1970), Huse, E. (1980), Neumann, J. (1989), Kotter, J.P. (1995) and Ackerman Anderson, L. and Anderson, D. (2001).

It is clear that change within an organisation involves a transition or journey for the individuals involved. Understanding the experiences of people and their natural reactions to change, and supporting them through the transition will help to ensure the success of the change process. Taking this into consideration in this project, the author chose the HSE Model for implementation of the project as it appears to be the most suitable in the context of the organisational change involved.

3.3 The Change Process

Throughout the change process, service user and community interests, needs and perspectives must be kept at the centre of the change activities. Friedman (2001) suggests four attributes when dealing with change within an organisation : be proactive and reflective, be critical and committed, be independent and work well with others, and have aspirations and be realistic about limits. When approaching this project the author was cognisant of these guidelines. This is why throughout the project the need for ongoing feedback to facilitate and include the input of the stakeholders involved was sought . People support what they help create and as such people affected by a change must have the opportunity to participate actively in the change process and to develop a sense of ownership and commitment to the change. The direct participation and engagement of all members of staff attending the handover in this project played a key role in shaping the change project and delivering its outcomes. In acknowledgement of the long tradition and culture of staff involvement in the development and delivery of services within the organisation, staff should be engaged at an early stage. In this project the initial involvement and input into the project by the NCHD's and consultants in the planning stages of the project was deemed vital to the success of the change project. The HSE model is based on the fact that change is not linear but rather a continuous and

adaptive process in which all of the elements are interrelated and can influence each other and this is why the author chose it for use in this project. Knowing what is driving the change will help to determine what must change and why. It will also assist in assessing the strength of what is forcing the change and what is resisting the change. Knowledge of these factors will help leaders to be clear about the urgency for change.

3.3.1 Step 1: Initiation

Preparing to Lead the Change

The purpose of this stage is to determine the specific detail of the change and to create support for the change process (HSE 2008).

Careful attention needs to be paid to effective communication methods and a respectful and engaging style in line with the needs of the stakeholders. Reed *et al* (2009) highlighted the importance of understanding who is affected by the decisions and actions and who has the power to influence the outcome. This led the author to a stakeholder analysis (Appendix 1), establishing key stakeholders who would support the project, and important bi-standers, who would enable the project.

The stakeholder analysis changed during various stages of the project development as it became clear as to who the key players were.

Identifying the head of the Paediatric department as a key stakeholder in the process was vital as his close involvement served as a constant support throughout the process of implementing the changes. Firstly, approval from the lead consultant was obtained to begin the process of carrying out the intervention and change to the handover. As he was the main educational lead in the hospital and responsible for the delivery of the handover it was felt that he was the most appropriate person to approach with regard to setting up the project. His involvement was felt to be crucial going forward as the need for a senior input and support was felt to be vital for the success of the project. During the project development, the role of this consultant was fundamental. His interest in teaching and enthusiasm towards improvement in the structure of the teaching and therefore in the project was a source of unwavering support for the author throughout the change process. Following on from this Research and Ethical Committee approval from the hospital was obtained.

A SWOT (Strengths, Weakness, Opportunities and Threats) analysis (Appendix A) was done. This helped to identify external drivers for change, in particular. In carrying out the change it was important to identify the potential threats to project implementation and continuance so as to address them early in the project and overcome these barriers.

These included:

- Insufficient interest from the paediatric director of training to facilitate the project
- Insufficient engagement by trainees to partake in the change and adopt the new style of presentation
- Failed ongoing support of the consultants and NCHD'S
- Failed continuation of the project following my departure from the hospital

With regard to the last threat mentioned it became clear at the beginning of the project that for it to be an ongoing success that there would be a need to identify a person that would take the project on going forward as it required someone who would be available to attend the handover on an ongoing basis once the author left the organization to change jobs.

Initial objectives and outcomes of change:

As presented in Chapter 1 the aims and objectives of the project were set by the author based on the need for change and improvement to the structure and content of the weekend handover meeting.

Outline the initial business case for change

A business case was not constructed for this project as there was no significant fiscal cost involved. Printing of the poster was funded by the

author and printing of the SBAR sheets for the registrars to take on call was carried out on site at the hospital.

Resource Requirements :

A preliminary resource assessment was completed, identifying sourcing of appropriate support, guidance and expertise from within the system ensuring initiative success. Training and educational impact was paramount to achieve objectives which did not require extra resources. The location for the meeting was ideal as it was set up with everything required to conduct the session as planned by the author.

Assess Readiness and capacity for change

Having finalised the project aims and objectives and identifying leaders and influencers in the process, it was necessary to identify if individuals involved could undertake process requirements, outlining the supportive role required of the project lead. By assessing readiness and change capacity in the initial group meeting and identifying areas of resistance early the capacity for change was assessed. By involving all participants in the process early to shape the change, the capacity for lasting and successful change was increased.

3.3.2 Step 2: Planning

To create support, ensuring clear purpose and resolve, required the determination of the specific detail of the handover for the organisation.

The focus therefore in the planning stage was to build organisation wide commitment, momentum and capacity.

Building Commitment

Commitment is perhaps one of the most critical factors in ensuring support for change initiatives. Seventy percent of all major change initiatives within an organization fail (Kotter 1996). Failure occurs, Kotter claims, because organizations often do not take the holistic approach required to see the change through. For change to be successful, he claims that seventy five percent of an organisations management must 'buy into' the planned change. Providing clarity about the purpose of the change and an understanding of how the change was identified enables others to become committed to the change process (HSE, 2008). It is important to communicate the information about the change on several different occasions and in different ways as attempted by the author in this project. The communication plan should be designed as an ongoing process rather than a once-off event. This is why in the implementation phase, as will be discussed, the author used multiple modes of

communication ie verbal and via email as well as visual aids to aid the implementation of the change project.

Determining the detail of the Change

This study was set in a tertiary paediatric hospital looking at improving the structure and therefore the educational value of a weekly weekend handover meeting held on a Monday morning lasting approximately 30 minutes. The participants were those that attended the meeting which included NCHD's (Non Consultant hospital doctors) of all grades and consultants within the hospital representing a broad range of specialities.

Developing an Implementation Plan

The aim of the project was to set up a successful, sustainable education programme that is effective and viable on a long term basis for both the learners and the teachers involved in it. By doing this, the main goal was to improve the learning environment and support the ongoing professional development of the doctors working in the hospital. It has been said that if the goal of evaluation is to improve a programme then no evaluation is good unless findings are used to make a difference and so by receiving and acting on continuous feedback throughout the process the aim was to improve the learning environment for all those involved

3.3.3 Step 3: Implementing Change

In the initial phase to introduce the concept of SBAR and the research as a whole; there was an open discussion session led by the author at the beginning of the Monday morning handover session. Following an introduction and overview of the project the concept of a change to handover was discussed. This session served as an open discussion forum for people to give their opinion on the introduction of a new structure to the handover. This was useful as it involved the participants in the project from the start. By having this session at the beginning of the change process all the key stakeholders were involved. It has been shown that talking to a key individual or a group of key individuals is an informal way of gaining insight into a particular problem or situation.

This method has a number of advantages, for example:

- it enables ideas to be explored in an iterative fashion
- detailed information can be obtained
- it is quick and inexpensive.

During this session the concept behind the introduction of SBAR was explained and the value of effective communication within the presentations was highlighted. Those at the meeting were reminded of the importance of a supportive learning environment. There was a mixed response within the group for the project at the beginning. Some of the junior doctors expressed their concern about a more structured

presentation and felt that there may be more pressure on them to deliver a polished and prepared presentation while others felt the structure would make it easier for them to get up as they would now have a framework to use. Todam (2005) concurs that without resistance, no productive change is occurring. Thus questioning, scepticism and resistance further opened possibilities for realising change resulting in an effective, useful structure (Mento et al 2002). At this session it was suggested by some members of the group that handover sheets to take on call with them where they could record the relevant patient details with an SBAR format would be useful. (Appendix G) These sheets were devised by the author based on these recommendations and subsequently edited based on the feedback taken from registrars on call using the sheets. Within this session one of the consultants expressed their concern that this session lacked educational value and that a more structured approach with case presentations on powerpoint and evidence based latest research would be more useful for the learning of the group. However it was the feeling of those within the group especially the junior doctors that this would not be feasible or fair on the doctors on call to have to prepare a structured presentation similar to the morning report in the US and that the expectation for the standard of the presentation would be too high if this structure was adopted.

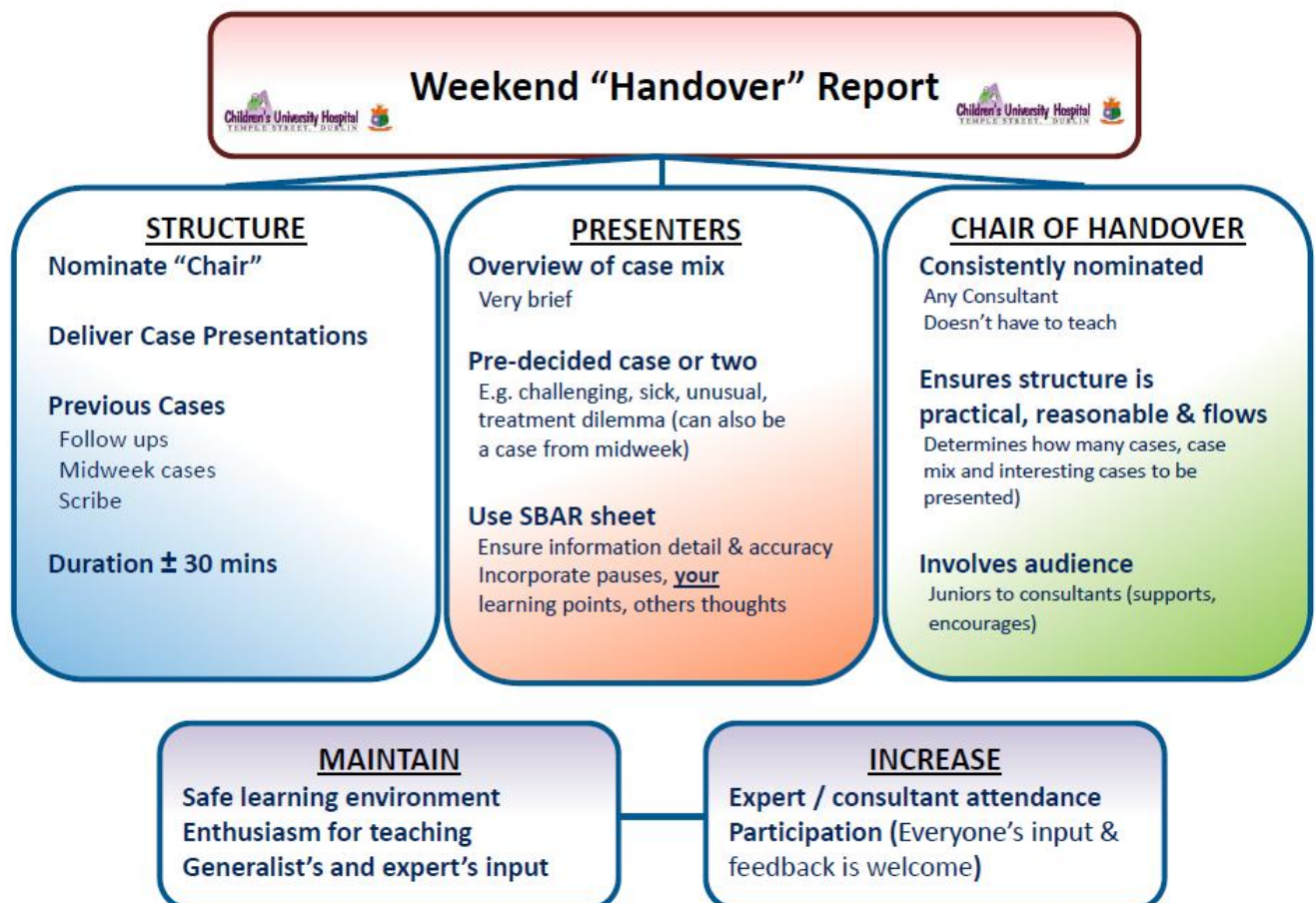
The role of the consultant as a facilitator was discussed with the audience at the initial meeting and it was felt that the consultant on call for the weekend would be the most appropriate person to lead the discussion. There was some resistance from the consultants as they felt that it would be more appropriate to have a registrar act as a facilitator. However it was agreed on that this would not be most useful for learning and so the consultants agreed to take this on as their responsibility.

The role of facilitator as being the consultant on call was one that did not last, however and as the project evolved it became clear that the lead consultant who had ran the handover previously was the one who was taking on the bulk of the responsibility for the running of the session as previously. Following on from this discussion forum an email was drafted by the author and sent to all those attending the handover detailing the guidelines set out for the structure and the expected roles for those attending and summarising the discussion and outcome of the session. (See Appendix E)

After this initial meeting a reminder poster summarizing the key points and recommendations was drafted by the author. At the next handover meeting this was hung in the conference room to highlight the advised structure for the session as agreed by the group. (See *Figure 3*) The poster as seen below in *Figure 3* summarised in a clear format the overall aims of the project and sub divided the categories of interest into

overall structure of the handover, presenters role and role of the chair of handover as agreed by the participants at the previous meeting. By providing clear instruction to those involved as to what was expected of them it served as a visual reminder to those attending the weekend handover as to what they were aiming to achieve in improving the handover. By having a constant visual reminder in the room the author felt that it was more likely that there would be lasting change to the session.

Figure 3: Weekend Handover Report Poster



Oct 2013

Implementing and Sustaining the Change

It was felt, from the outset, that in order to consolidate the use of SBAR and maintenance of the changed handover within the institution it was important to capture the feedback from the staff who had participated in the change project. This would serve to identify the challenges and enablers, thus providing clear guidance for the permanent role out of the use of SBAR in handover. To realistically support individuals through the actual process, assistance was provided to their reactions to change, both positive and negative. To this end, the writer conducted a survey with the staff involved in the handover to gain insight into the reaction and opinions of those attending and partaking in the handover. This survey was carried out following implementation of the changes to handover after 8 weeks of handovers had taken place and will be discussed in more detail in Chapter 4 when discussing the evaluation process. Whilst some argue that culture cannot be influenced but that patterns simply emerge over time, evidence demonstrates culture can be adapted by conscious effort, benefiting the quality effect through the utilisation of four strategies: action of founders and leaders, aligning artefacts with the desired culture, introducing culturally consistent rewards and attracting, selecting and socialising employees (Davies et al 2000).

3.3.4 Step 4: Mainstreaming

Supporting Ongoing Change

It is clear that sustained change is the key to success within a change management project such as this. What was difficult in this project was the short time period that was available to implement the change before having to move to another hospital. The nature of the job as an NCHD with regular changes of hospital makes the buy in and support of the stakeholders, in particular the senior members of staff all the more important. Following on from this, it is evident that a plan for building in reflective practice and feedback mechanisms at all stages of the change journey is essential, to ensure that the change effort will be regularly reviewed, refined and refocused if required. All change is influenced by past experiences. Existing knowledge and organisational memory needs to be retained and utilised as appropriate during the change process. The change process should be monitored to ensure it is on track and that objectives are being achieved. In carrying out a survey once the initial changes were implemented the views and input of those partaking in the handover were taken so as they could be used to feed back into the project and improve its chance of success. Processes for joint evaluation and measurement of the outcomes of the change need to be determined at an early stage, together with a plan for deciding how these outcomes will be obtained and used.

It is clear that processes to acknowledge success at different key milestones along the change journey should also be designed in order to monitor progress and help sustain motivation and momentum. The focus at this stage of the project was on reviewing the effectiveness of the change process and forming the basis for continuous improvement. It is appropriate at this stage to formally end project-based work and mainstream responsibility for activities to the appropriate people within the organisation so that changed practices become part of the normal business of the organisation. This is why at the end of the project it was important to identify a person within the organisation who would take ownership of the project and encourage its establishment as part of normal practice within the organisation.

Making it the way we do our business

Embedding change in an organisation and making it “the way we do our business” (HSE, 2008) is the ultimate goal when leading change. The overwhelming support from staff and the positive findings of the survey (which will be discussed in full detail in chapter 4) suggest that the academic staff and the institution itself are poised to embrace the changes made to the weekend handover meeting. However given the time constraints with the implementation of the project within the scope of the masters timeframe the point at which the changes are fully

embedded in the institution was not reached. This will take time and ongoing commitment from those members of staff that remain in the institution on an ongoing basis. The challenge, as mentioned previously, of junior doctors moving every six months remains a difficult one and as such, the engagement of consultants within the organisation was deemed vital to the success of the project at the beginning of the change process.

3.4 Summary

This change initiative, though demanding at times, was implemented successfully. Using the HSE model was critical for guiding the process and helped to structure the approach to the change initiative. The core focus of the HSE model is its attention to stakeholders in the initiation and planning stages, and ensuring that stakeholder engagement was established and maintained throughout the project was central to its success. The inclusive approach taken for the project with all stakeholders including senior and junior members of staff within the organisation had the effect of creating a sense of ownership in the project and therefore the initial resistance or reticence that was observed in the early stages of the change did not persist.

Chapter 4: Evaluation

4.1 Introduction

Evaluation is described as *...the systematic examination and assessment of the features of an initiative & its effects, in order to produce information that can be used by those who have an interest in its improvement or effectiveness* (WHO,1998:3). This chapter outlines the evaluation plan for an education initiative regarding the implementation of a structured communication tool in a handover meeting in a paediatric institution. It provides a brief overview of the purpose and theoretical background of evaluation. According to Scriven (2007), the aim of an evaluation is to determine the value, worth, or significance of a product or service. Robinson (2002) asserts that all evaluation models share at least one common element: to conduct a rigorous evaluation and for reliable and systematic evidence to support any conclusions. For Stufflebeam and Shinkfield (2007), evaluations are therefore a process of quality improvement, while Scheerens and Glas (2003) and Stufflebeam (2001) add that this method operates to liberate and give power to key stakeholders.

Evaluation may cover the process and/or outcome of any aspect of education, including the delivery and content of teaching. Questions about delivery may relate to organisation—for example, administrative arrangements, physical environment, and teaching methods.

Information may also be sought about the aptitude of the teacher(s) involved. The content may be evaluated for its level, its relevance to curriculum objectives, and integration with previous learning. Even though change by its very nature is emergent and continuous, leaders should look back formally at a given point in time and identify the learning from the change experience. One of the main learning tools is evaluation. Mechanisms for evaluation should be in place at all stages in the change process. Evaluation takes time and energy therefore it needs to be planned for and resourced appropriately as was the case in this change project. The choice of evaluative model is an important aspect of the evaluation of learning spaces, as the model chosen can provide a unique selection of knowledge with which to further our understanding of the design process. Evaluative models offer insight into which areas can be better fulfilled in future undertakings, structure information for collaboration within the community and ensure accountability of all stakeholders involved in developing a physical learning space.

4.2 Model for Evaluation

The model that I chose for use in my project is the CIPP (Context, Input, Product, Process) model as I believe that it is the most appropriate for use in the context of my proposed learning environment and allows for the evaluation of quantitative and qualitative data. The **CIPP model** was

devised by Guba, and further developed by Stufflebeam, in the 1960s. It arose from the observation that traditional approaches to evaluation designs were found to be limited and often too rigid for evaluating dynamic social contexts. (Stufflebeam et al, 1973; Stufflebeam and Shinkfield, 1985; 2007; Stufflebeam, 2001). The thoroughness of the CIPP model, however, is also one of its major limitations. From a theoretical perspective the model is complete, vigorous and democratic, though it is also idealistic and dependent on individual situations.

4.3 Rationale of using CIPP

As it was not designed for any specific program or solution (Guerra-Lopez, 2008), CIPP is adaptable, lending itself to use in varying situations as a "...comprehensive framework for guiding formative and summative evaluations of projects, programs, personnel, products, institutions, and systems" (Stufflebeam 2003b). CIPP allows for evaluations to occur from the planning to outcome stages of a project, allowing for on-going development during the process. This holistic approach shows evaluators that they need not wait until the completion to evaluate (Guerra-ópez, 2008; Robinson, 2002) which was ideal in the case of my project where continuing evaluation was key to the successful implementation of change in the organisation.

The main advantages can be summarized as follows:

- ❖ Thorough/comprehensive framework
- ❖ Equity to all stakeholders
- ❖ Formative and summative tools used in gathering data
- ❖ Ongoing development throughout process

Fig. 4 Key components of the CIPP Evaluation Model and associated relationships (Stufflebeam 2003)



It is clear that to truly act on evaluation there are many processes to go through and it is not an easy task. Some actions are hard to take but by doing so institutions show a willingness to contribute to and enhance their communities of practice. To participate in the ways described

needs the development of proactive institutional self-assessment in the light of data, which acknowledges the importance of everyone involved and sets itself high standards. In my project I believe the use of the CIPP model was instrumental to the success of the change project and with the comprehensive and thorough approach encouraged by the model, lead to meaningful and lasting change within the organization. The CIPP model was used to evaluate and can the process undertaken can be broken down as follows:

4.4 Evaluation Process

Context Evaluation

‘What should we do?’

In this initial phase the author assessed the requirements, the problems and relevant opportunities, directing the overall project aims.

- ❖ Review current practice/relevant literature with regard to handover
- ❖ Plan meeting with participants
- ❖ Engage leaders/main stakeholders within organisation

Input Evaluation

‘How do we do it?’

This directed the planning of the project recourses needed to achieve the outlined goals, and included information gathering. To accomplish the input evaluation the following steps were completed:

- ❖ Prepare poster

- ❖ Draft SBAR sheet for registrars to take on call
- ❖ Feedback from participants following introductory meeting

Process Evaluation

‘Are we doing it as planned?’

- ❖ Email to participants and reminder poster hung in handover room
- ❖ Attend handover and observe use of tools provided and adherence to recommendations

Product Evaluation

Did the implementation of change management project work?

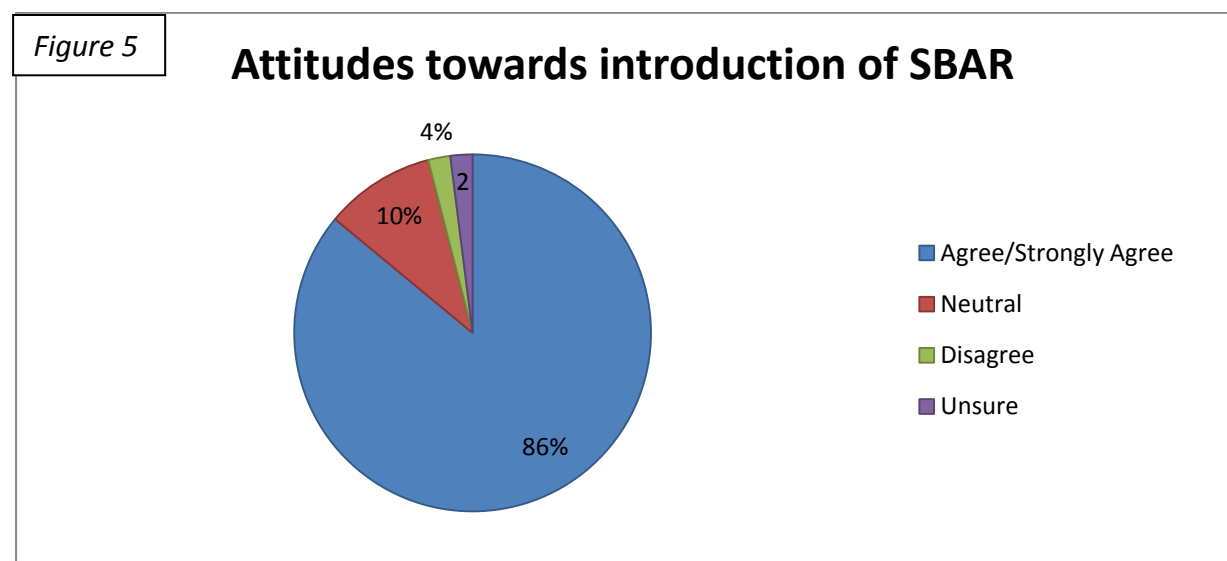
- ❖ Survey of participants with quantitative and qualitative data included (See Appendix)
- ❖ Ongoing feedback encouraged

4.5 Results

The key evaluation step that yielded quantitative and qualitative data was the survey carried out following implementation of the changes to handover. Linking the key objectives to the outcomes is the vital step in any organisational change project and the survey attempted to evaluate whether these had been met. Both structured and free text response questions were incorporated and registrars were asked to be as honest and open as possible and responses were anonymized to encourage this. This survey asked participants to rate on a Likert scale whether

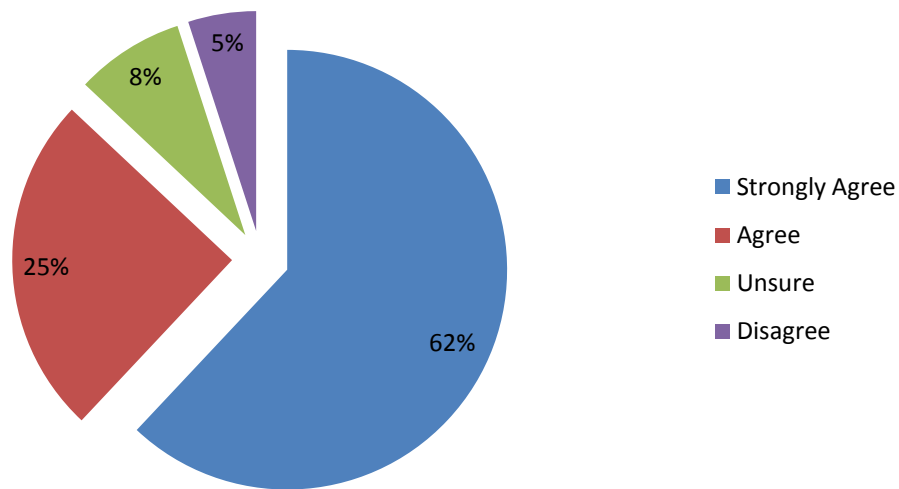
they agreed or disagreed with a number of statements pertaining to the implementation of changes to handover. The final questions in the survey allowed participants to document their opinions and any comments or suggestions that they had with regard to the project.

There were 18 staff surveyed which represented the majority of junior doctors attending the handover. Following the introduction of SBAR there was a very positive overall response as represented in *Figure 5* with 86% of those surveyed agreeing that the introduction of SBAR was a positive step.



With regard to the enhancement of the learning environment, as seen in *Figure 6* the majority of participants (87%) felt that the learning environment was enhanced which was one of the key objectives of the project.

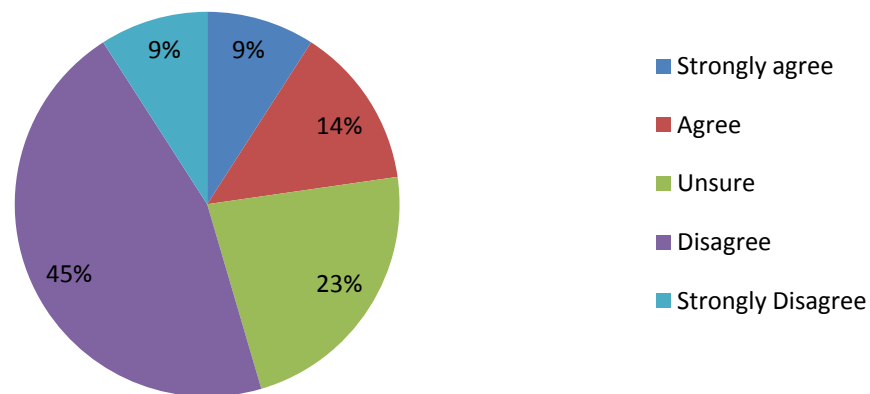
Figure 6

Learning environment was enhanced

The reaction towards the introduction of a facilitator was one that the author had not anticipated. At the start of the project it was felt that a nominated facilitator (ie the consultant on call for the weekend) would take over this role within the handover. Traditionally this role had been previously held by the lead paediatrician in the organisation. However as the project progressed it was clear that this role would remain unchanged from previous as both consultants and NCHD's were not keen to change this particular element of the handover.

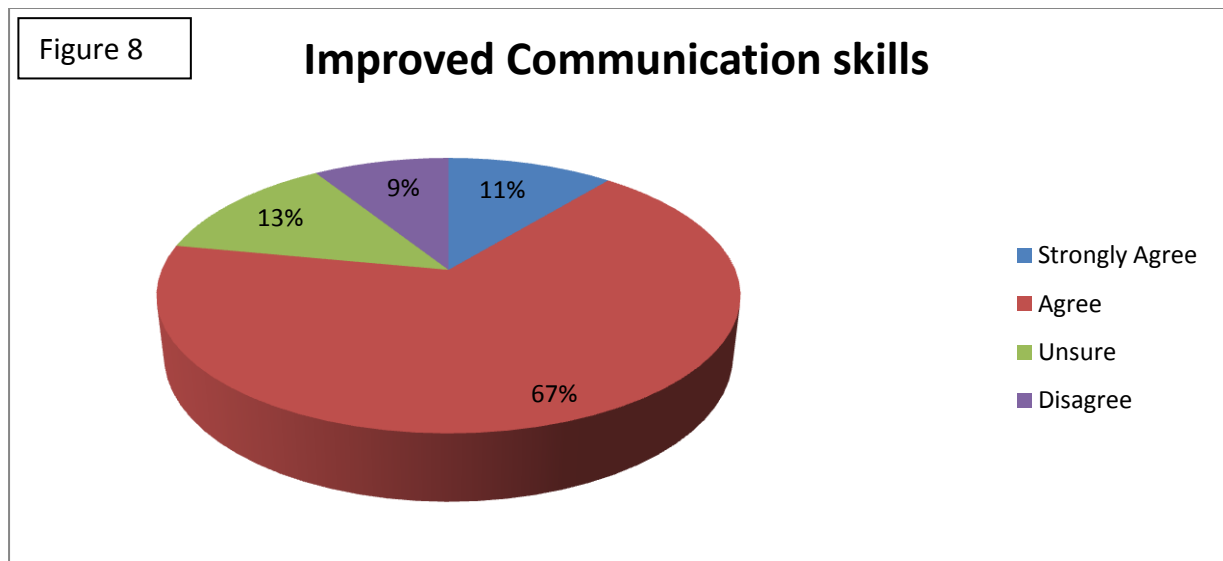
Figure 7

Change in Facilitator improved session



As represented in *Figure 7* 54% of participants disagreed that a change in facilitator improved the handover. Comments that were observed within the survey were that “ when handover is led by xxxx consultant as it was before it runs much smoother..... and they are much more supportive than other consultants”. Participants were keen to keep this part of handover unchanged which was clearly articulated in the open ended questions in the survey and reinforced the result of the closed question. With regard to the participants opinions on whether their communication skills improved following the introduction of SBAR as seen in *Figure 8* the results were encouraging with an impressive 78% agreeing or strongly agreeing that it did improve communication. It is clear that there is still work to be done as there were 13% of those surveyed who were unsure as to whether there was any impact on communication skills.

With reference to those that disagreed looking at the open ended questions there were some comments with regard to it being too rigid in structure and there were people who preferred the previous unstructured way of presenting more.



Qualitative Data

Participants were also encouraged to provide comments in their survey responses. When asked what was good about the changes made to handover , sample responses included: "you know what structure to expect during a handover and it helps to identify missing information" and "it reinforces what is key to a handover". One participant felt that "the use of SBAR made handover more time efficient". Among responses regarding the disadvantages of SBAR was concern about templates being "less flexible" and suggested that more SBAR template

handover sheets should be made available on the wards and in the handover room. Another recurring comment that had not been addressed within the project objectives at the outset but was an interesting finding was that registrars articulated that they would appreciate more constructive feedback from seniors on the quality of their handovers. With regard to any suggestions given one participant felt that “the introduction of SBAR and structure of handover should be talked about at start of every six months so registrars know what is expected of them”. This point was interesting as this was one of the key concerns of the author for the sustainability of the project going forward. Given the richness of data obtained from within the survey from the free text questions the author accepts that while there was valuable information obtained perhaps the use of a focus group or semi structured interviews to gather extra information if time had permitted would have been helpful. This is something that should play a role in the future of the project and the author feels that a more comprehensive evaluation to gain more qualitative data following a longer implementation period would give a clearer indication as to the success of the project.

4.6 Summary

In this chapter the author has described the evaluative process undertaken in this project using the CIPP model. Learning from and about evaluation often requires us to change our mental models –to rethink our assumptions and beliefs and to develop new understandings about our programs and evaluation processes. This logically should lead on to an organisational learning approach to evaluation. Such an approach to evaluation is context sensitive, and requires ongoing support dialogue, reflection and decision making at department and organisation-wide levels and contains strong commitments to self-evaluation and practitioner empowerment. To an increasing extent the evaluation model chosen is influenced by the evaluators' own philosophy about evaluation, although other factors such as time, resources, expertise and availability of staff also strongly influence procedures used. Most program evaluation experts agree that there is no one best model (Mc Namara *et al* 2010). While the results are promising based on the initial evaluation of the project following implementation, it is clear, however, that a longer study on whether the effect on SBAR on handover is sustained is required and this will require ongoing evaluation and input from all those attending. The use of a larger cohort of doctors

and the potential for use of focus groups to encourage further development of the meeting is something that should be considered.

Chapter 5 Discussion

5.1 Introduction

This thesis describes a change in teaching and learning approach within a medical handover meeting which was facilitated using the HSE change model (2008). This chapter will discuss the pertinent findings and outline the implications of the change for the organisation. The strengths and limitations of this change initiative will also be discussed.

Despite being essential to patient care, current clinical handover practices are inconsistent and error prone. Efforts to improve handover have attracted attention recently, with the SBAR tool increasingly utilised as a format for structured handover communication. Handover is right at the boundary between service delivery and education and is an area where these two vital components of medicine have to overcome difficulties to successfully work in harmony. There are, however, many simple ideas to improve practice in terms of patient safety but also maximise learning opportunity. Handover is here to stay and it is the authors opinion that it needs to be done well while making the most of the opportunity it provides. A number of recommendations have been made on how to improve handover. These include ensuring a set time and place free of interruption, training sessions, senior supervision and use of electronic aids. (Australian Medical Association, 2006; Arora *et al*,

2005;Borowitz, 2008). One important recommendation is that handover should follow a standardised approach. While I accept that many of the recommendations aspire to producing the “perfect” handover, by providing a clear structure within a supportive environment the quality of the handover as an educational meeting can be optimized. Irrespective of whatever else they learn during handover, trainees need to learn how to handover. Handover is one of the best opportunities in the working week for consultants to see trainees performing clinical work. This provides a forum for teaching and learning, mentoring, role-modelling professionalism, assessment (informal or with a structured assessment tool) and giving feedback. Handover skills need to be defined, taught and assessed, with clear standards and expectations presented to each new cohort of trainees at the beginning of their jobs.

This change project evaluated the effects of introducing the SBAR tool into weekend handover in a paediatric hospital. The results showed that overall doctors involved in the handover believed it was improved by the use of a structured communication tool. They felt more confident in giving and receiving handover, which we would hope translates into improved accountability and responsibility for patient care, a key purpose of handover. These results are consistent with studies of SBAR and other communication tools used in other settings, where they have

been shown to increase communication content, improve the structure and consistency of delivered information.

5.2 The process of Change

Implementing change is not easy. Change is never as simple, linear or comfortable as major change models would suggest (Sembi, 2012).

Creating a vision and articulating a strategy to implement that vision requires strong leadership skills. Champagne (2002) claims that according to management gurus, change is natural, inevitable and urgent and can be brought about by competent, effective leadership. In this project the author learned that organisational change has to be managed carefully and meticulously and someone has to take responsibility for ensuring that the planned change takes place. In this change project the use of the HSE model (2008) facilitated the change within the organisation. While acknowledging that there is no one model that fits perfectly the HSE Model provided a comprehensive and structured approach to this change project.

The author felt that while there were challenges with regard to the timeline of the project, the willingness and engagement of those within the organisation towards the change made this an enjoyable and satisfying project. The presence of an inspirational and supportive leader within the organisation meant that the project had excellent support from

the beginning which was clear from the outset made the process much smoother than it may otherwise have been if this level of support had not been experienced by the author. During this masters the focus on leadership as a key driver in organisational development has been evident and there is now strong evidence emerging to support the relationship between leadership and quality improvement and patient safety (Wong & Cummings, 2007) as well as staff retention and job satisfaction (Weberg 2010),

5.3 Organisational Impact

As described in Chapter 4 this project had a positive impact on the handover meeting as reported by the participants within the organisation. Iles and Sutherland (2001) outline that the term organisational development (or OD) is interpreted in different ways by different practitioners; some seeing it as a comprehensive organisation-wide development programme with particular underpinning principles and common approaches, others using it more loosely to describe any development programme within an organisation which is designed to meet organisational objectives as well as personal ones. The main aim of the project was to improve the structure and content of the weekend handover meeting by streamlining the presentations to optimize learning and it is clear that based on the feedback received during evaluation

that this was achieved. Participants reported an enhanced learning environment and embraced the new way of presenting. The fact that there was involvement of all stakeholders from an early stage in the project was central to the success.

5.4 Advantages of project

A particular strength of the project lay with the participative approach. All members of staff appeared to be engaged with the project. By achieving such 'buy-in', the change project was implemented and brought to completion. Time spent on the initiation and planning stages were vital. All participants demonstrated camaraderie and a willingness to adapt and change and in the author's opinion, these were key drivers in generating a successful outcome of the initiative. The HSE model of change was used to good effect.

Culture within the organisation

Ravasi and Schultz (2006) state that organizational culture is a set of shared mental assumptions that guide interpretation and action in organizations by defining appropriate behavior for various situations. At the same time although a company may have their "own unique culture", in larger organisations, there is a diverse and sometimes conflicting cultures that co-exist due to different characteristics of the management team. Within the hospital environment where the project was happening

there was constructive culture present where all members were encouraged to work to their full potential, resulting in high levels of motivation, satisfaction, teamwork, service quality. This positive culture meant that implementing a perceived improvement was met with enthusiasm and unquestionable support from the start which made its implementation easier.

Support from members of staff/stakeholders:

The project received unanimous support from the members of staff involved in handover. Due to the focus on teaching within the organization the project was greeted with a positive attitude from both junior and senior members of staff. The presence of leaders within the organisation who facilitated the project was the key to its success. By reflecting an interest in the growth and development of people, a high positive regard for them and sensitivity to their needs the project was able to develop. While there was debate at the initial meeting as to the new format and the form that it should take this served as useful as it meant that the participants were involved and engaged from an early stage. It is because of the highly participative nature of organisational development that the approach has the ability to implement planned change while at the same time taking account of emergent change

through listening to and encouraging active participation of all those involved in the change process as was the case in this project.

5.5 Limitations of Project

Small numbers for data collection

Due to the small numbers that attend the handover the numbers included in the survey distributed were small. While the response was very positive overall it is difficult to generalise the results as they only apply to this small group of people in this particular setting. If the author was to carry out the research again. While the numbers were small there was rich data collected from the survey which contained open questions where participants had the opportunity to comment and contribute their opinions on the changes introduced to the handover.

Evaluation

While there was rich information gained from the discussion forums held in the planning stages of the project it would have been useful to have a pre implementation survey to see what the feeling of the group was towards the handover practice pre change project. If the author was to carry out this project again this would be a definite part of the evaluation process that would have been carried out. The use of a survey with both closed and open ended questions gave a clear indication that the

changes were met with positivity within the organization but it is clear that there is ongoing evaluation needed.

Sustainability of project

Responsibility for ongoing implementation and monitoring of change is an inherent part of the role of all leaders and managers in the system. It is important, however, to be explicit about the nature of this responsibility and to build it into the performance management system within the organisation. As the author was the principle investigator and responsible for implementation of the change project it was difficult to identify someone with the same enthusiasm for the project to take responsibility for it going forward. The author acknowledges that this was a limitation of the project and that having to leave the organisation meant that the ongoing input by the author was more challenging. This also applies to the constant turnover of junior staff within the hospital and this is something that I believe needs more consideration as there may be challenges in maintaining and sustaining the changes to handover if every six months a new group arrive that have no prior knowledge of the project or expectations. To get around this the author proposes a session during orientation for all new doctors within the organisation where they are given a summary of the guidelines with respect to

optimizing learning during handover and introduced to the structured approach to handing over using SBAR.

Time constraints of project

The effect on handover on a long term basis needs further evaluation as it is a continuous process of improvement which was beyond the scope within the timeframe of the project. Ongoing feedback and further evaluation will be needed to ensure the continuous improvement and development of the handover meeting. Whether the positive effect observed at evaluation will be sustained over a longer period is currently unknown, however the process involved in facilitating change within the organisation was deemed successful.

5.6 The project going forward

The implementation of the change project would seem to indicate a positive outcome but it is an issue that requires further consideration if the organisation is to continue to engage in this new way of delivering handover effectively whilst demonstrating its ability to provide a supportive and productive learning environment for all those attending. Good handover practice in itself is an opportunity for modelling and “learning by doing”. To know how to implement this we need some understanding of our learners, their learning needs, how learning takes

place and how it can be promoted. Many of these are key skills taught, to some degree, as part of primary medical qualifications, although there is little evidence to suggest that they are being taught with handover specifically in mind. (Beasley, 2006) This should be fostered from an early stage by defining and actioning a role for medical students in handover. This was not something that was looked at in this project due to time constraints but is definitely worth consideration when looking at the future development of the project going forward.

5.7 Conclusion

Current trends in medical postgraduate learning reveal increasingly formal and standardised handover events often driven by the recommendation to measure competency outcomes. There is no fixed curriculum within the handover discourse which assumes its own general (albeit not entirely inconsistent) structure. The literature confirms clinical handover as a high risk scenario for patient safety (Wong, Yee, & Turner, 2008). However, despite a marked increase in the literature on clinical handover over the past decade, there are still a number of knowledge gaps and a lack of agreement on the most effective handover methods. In this project the aim was to improve the learning experience for those attending the medical handover in a paediatric hospital by focusing on the structure of the handover and the

organisation of the presentations. Assisting doctors to change their current practice of handover communication can be difficult. Patterns and routines in communication processes are challenging to change. Providing the leadership teams with strong communication and collaboration strategies facilitates improvements in work environment. It is clear that better handover is of daily benefit to practice and helps the development and broadening of communication skills. A well-led handover session provides a useful setting for clinical education as shown in this study and going forward the continued implementation and development of the changes made should make for a sustained and lasting change for the better within the organisation. The continued engagement and enthusiasm of the staff members will be what makes this a sustained and lasting change for the better within the organisation.

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Appendix A

SWOT Analysis

(Humphrey A ,2005)

Strengths

- ❖ Positive learning environment
- ❖ Supportive Culture within organisation

Weaknesses

- ❖ Short time period to implement
- ❖ Dependent on participation by all members of staff

Opportunities

- ❖ Need for improvement to handover and focus within organisation
on education and training

Threats

- ❖ Lack of support from the consultants
- ❖ Maintenance of the programme beyond authors training period
within the hospital

Appendix B – Force Field Analysis (Lewin, 1951)

Drivers	Resistors
<ul style="list-style-type: none">❖ Teamwork❖ High standard❖ Good communication❖ Motivated Staff❖ Good morale❖ External – increased competition from other institutions	<ul style="list-style-type: none">❖ Reluctance to change❖ Increase in workload❖ Loss of control❖ Established custom and practice

Appendix C

Survey:

Give each statement a grade from 1 to 5 to indicate your choice
(Questions 1-5)

(1) Strongly Disagree 2)Disagree 3)Unsure 4)Agree 5) Strongly Agree

1. Handover was improved by the introduction of SBAR

2. The introduction of a facilitator helped to structure the session

3. There was improved content in presentations following introduction of SBAR
as a tool


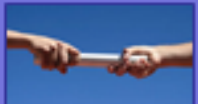

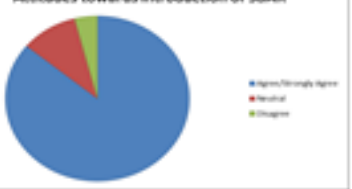

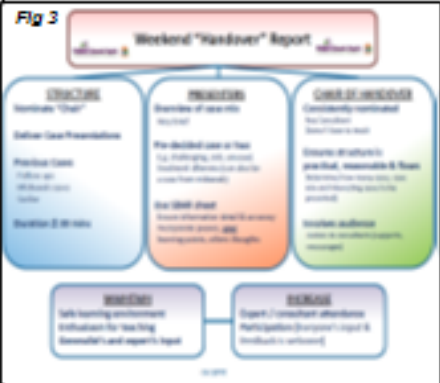
4. My communication skills were developed by using SBAR

5. The learning environment within the handover meeting was enhanced
following the changes

6. Is there anything in particular you liked or disliked about the change in
structure /content of the handover meeting?

7. Any other comments/suggestions?

Appendix D

<div>  <div> Weekend Handover in a Paediatric Hospital: Introduction of SBAR <p>Suzanne Slattery (smcslattery@yahoo.co.uk) MSc in Leadership in Health Professions Education Institute of Leadership, RCSI</p> </div>  </div>		
Introduction	Methodology	Evaluation
<p>❖ Handover may be described as the "transfer of professional responsibility and accountability for some or all aspects of care for a patient".¹</p> <p>❖ Evidence that lack of formal systems for patient handover impede the good practice necessary to maintain high standards of clinical care for those involved.</p> <p>❖ Setting for project : tertiary Paediatric hospital local handover report which happens weekly with case descriptions of acutely admitted patients over the weekend.</p>	<p>The HSE Model for change was identified for use as emphasis on engaging with staff was deemed vital (2008).²</p> <p>Figure 2: HSE Change Model</p>  <p>Initiation:</p> <ul style="list-style-type: none"> ❖ Identifying need for change, drivers and resistors ❖ SWOT and stakeholder analysis <p>Planning:</p> <ul style="list-style-type: none"> ❖ Major stakeholders engaged ❖ SMART Objectives <p>Implementation:</p> <ul style="list-style-type: none"> ❖ Introduction session, summary email and poster in conference room as seen below in Figure 3 	<p>The CIPP model for evaluation was used in this project. A questionnaire was used to assess the response to change of the handover following implementation</p> <p>Attitudes towards introduction of SBAR</p>  <p>❖ Participants agreed that introduction of facilitator of benefit</p>
Aim & Objectives	Organisational Impact	Conclusion
<p>Aim:</p> <ul style="list-style-type: none"> ❖ To improve the structure and educational value of the weekend handover in a Paediatric hospital <p>Objectives:</p> <ul style="list-style-type: none"> ❖ Introduce an adapted SBAR (Situation, Background, Assessment, Recommendation) for use in presentations (Fig 1) ❖ Use SBAR to provide a stimulus for learning and set the stage for contextual learning 	<ul style="list-style-type: none"> ❖ Improved structure and content of handover reported by participants ❖ Enhanced learning environment for junior doctors ❖ Improved participation by senior and junior members of staff 	<p>❖ Better handover is of daily benefit to practice and helps the development and broadening of communication skills</p> <p>❖ A well-led handover session with structured presentations using SBAR provides a useful setting for clinical education as shown in this study</p> <p>❖ Ongoing feedback and further evaluation will be needed to ensure the continuous improvement and development of the handover meeting</p>
<p>Fig 1</p>  <p>❖ To identify a facilitator for the handover meeting to enable the handover to run more smoothly</p> <p>❖ Provide an encouraging and supportive learning environment for those partaking in the handover</p>	<p>Fig 3</p>  <p>Mainstreaming:</p> <ul style="list-style-type: none"> ❖ Change process monitored to ensure it is on track and feedback taken from participants ❖ Staff member identified to take on project going forward to sustain change within organisation 	<p>References</p> <p>1. Australian Medical Association. Safe Handover: Safe Patients. Guidance on Clinical Handover for Clinicians and Managers. Canberra: AMA, 2008. http://www.ama.com.au/node/508</p> <p>2. Improving our services: A service users guide to managing change in the Health Service Executive (2008)</p>

Appendix E

Email sent to all participants

Dear All,

Following discussion we would like to make changes to handover in an effort to improve the educational value of the handover for all. Most of these are already happening, we hope to make it a little more consistent and we hope you all agree.

1) Consultants:

At the beginning of handover if a consultant could “chair” and ensure structure of handover that would be great (see poster). Ideally they should direct things regarding the presentations, midweek cases and that the scribe is documenting the follow up cases.

2) Presenters/presentations:

If the presenter could give a non-exhaustive overview of their call and cases and pick a case or two for presentation. The presentation can be anything they felt to be interesting or unusual (e.g. a very sick child, an unsolved case, a rare presentation, a management challenge etc). We hope you use the SBAR information sheets. It's purpose is to capture important relevant factual information for certain cases so that the ensuing discussion is more relevant.

3) Unusual/Interesting cases:

These should be discussed (with or without SBAR sheet) and any learning points highlighted .

We hope that this will encourage a supportive and productive learning environment for those attending the handover and all suggestions are welcome. Please contact me if there are any improvements that you feel could be made

Sincerely,

Suzanne Slattery (smcslattery@yahoo.co.uk)

Appendix F



DEPARTMENT OF RESEARCH

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Dr. Nicholas Allen
Research Registrar
Neurology Department
Children's University Hospital
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21st March 2013

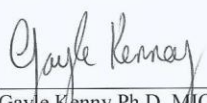
Re: 13.002. *A Qualitative study exploring the learning during Patient Handover.*

Dear Dr Allen,

The Department of Research has received and reviewed the amendments that successfully address the recommendations made by the Research Committee in a previous correspondence dated on 31st January 2013.

The Research Committee is now in a position to grant you approval for your project.



Yours sincerely,


Gayle Kenny Ph.D. MRCR
Research Manager

C.c. Professor Philip Mayne, Hon. Secretary, Ethics Committee.

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Appendix G SBAR Sheet

Registrar:

Situation (Sticker, name, age, sex, referral, ward, consultant)

Background (Relevant: comorbidities, PC/HXPC, PMHx etc)

Assessment (Vitals, Examination, Investigations, Results, DDx)

Recommendation (Immediate Rx, Ongoing Rx, Course)

Pick 2-3 Cases for Presentation & Document all admissions (referral, name, age, location etc)

<div>SITUATION</div> <div>BACKGROUND</div> <div>ASSESSMENT</div> <div>RECOMMENDATION</div>	<div>SITUATION</div> <div>BACKGROUND</div> <div>ASSESSMENT</div> <div>RECOMMENDATION</div>
<div>SITUATION</div> <div>BACKGROUND</div> <div>ASSESSMENT</div> <div>RECOMMENDATION</div>	<div>SITUATION</div> <div>BACKGROUND</div> <div>ASSESSMENT</div> <div>RECOMMENDATION</div>

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